

AMENDMENTS TO THE SPECIFICATION

On page 5, lines 7 - 16, please replace the following paragraph as follows:

The resin composition for a toner of the invention is, when 450% shear strain is applied at 190°C, preferable to have -27 or higher slope K of the relaxation modulus curve observed after 0.02 seconds to 0.1 seconds from the moment of the shear strain application defined by the following formula (2):

$$K = \{ \text{L o g } (G (0 . 1)) - \text{L o g } (G (0 . 0 2)) \} / (0 . 1 - 0 . 0 2) \quad (2)$$

in the formula, G(0.02) represents the relaxation modulus after 0.02 seconds from the shear ~~stain~~-strain application and G(0.1) represents the relaxation modulus after 0.1 seconds from the shear ~~stain~~-strain application. The above-mentioned relaxation modulus G(0.1) is more preferably 30 to 3,000 Pa .

On page 13, lines 5 - 16, please replace the following paragraph as follows:

The resin composition for a toner of the invention is, when 450% shear strain is applied at 190°C, preferable to have -27 or higher slope K of the relaxation modulus curve observed after 0.02 seconds to 0.1 seconds from the moment of the shear strain application defined by the following formula (2):

$$K = \{ \text{L o g } (G (0 . 1)) - \text{L o g } (G (0 . 0 2)) \} / (0 . 1 - 0 . 0 2) \quad (2)$$

in the formula, G(0.02) represents the relaxation modulus after 0.02 seconds from the shear ~~stain~~-strain application and G(0.1) represents the relaxation modulus after 0.1 seconds from the shear ~~stain~~-strain application.

On page 14, lines 5 - 25, please replace the following paragraph as follows:

The resin composition for a toner of the invention is preferable to have the $G(0.1)$ representing the relaxation modulus after 0.1 seconds from 450% shear ~~strain~~ strain application at 190°C in a range of 30 to 3,000 Pa. Based on the results of intensive investigations, inventors of the invention have found the offset of a toner occurs when the coagulating force of a melted toner is smaller than the adhesion force between the toner and the thermal fixing roller and the high temperature offset resistance of the toner is relevant to the coagulation force of the resin composition for a toner and the relaxation modulus of the resin composition for a toner under significant deformation. Further, based on the intensive investigations, inventors have found that if a resin composition for a toner having a certain constant relaxation modulus is used, the low temperature fixation property can be improved while the high temperature offset resistance of the toner is kept high as it is. If the relaxation modulus $G(0.1)$ is less than 30 Pa, the high temperature offset resistance of the toner to be obtained is sometimes insufficient and a sufficiently wide fixation temperature range cannot be obtained. If it exceeds 3,000 Pa, the low temperature fixation property of the toner to be obtained is sometime insufficient.

Please replace the paragraph bridging pages 16 and 17 of the Specification with the following paragraph as follows:

To shorten the rise up time (warm up time) after tuning on of a switch of a copying machine or a printer, a fixing roller has to be heated quickly to a prescribed fixing temperature and in this case, owing to overshoot, the fixing roller at first tends to be at higher temperature than the prescribe fixing temperature. Accordingly, in order to carry out printing well even in

such state, the toner is required to have good high temperature offset resistance. As the fixing temperature is lower and the high temperature offset resistance is higher, the warm up time can be shortened more. In general, to give a sufficiently wide option of the ~~hard-wear~~hardware design, the high temperature offset resistance is required to stand at 180°C or higher. If the melting point of the crystalline polymer is 180°C or higher, it is supposed that the crystalline portion of the crystalline polymer is not melted even at a high temperature and the above-mentioned network structure can be maintained and thus the high temperature offset resistance is improved. Further, along with speed up of copying machines or printers, a toner which does neither produce a fine powder nor cause filming even in a case of a high speed rotation is desired. Particularly, in the case of one-component type nonmagnetic toners which is charged by mechanical contact with a blade, such requirement for durability is much higher. If the melting point of the crystalline polymer is 180°C, the coagulation force of the crystalline portion of the crystalline polymer is high and the above-mentioned network structure is strengthened to possibly result in improvement of the durability.

Please replace the paragraph on page 59 on lines 1-7 of the Specification with the following paragraph as follows:

~~(Examples 11 to 12)~~(Examples 11 and Comparative Example)

Resin compositions for a toner and toners were obtained and evaluated in the same manner as Example 1, except that crystalline polyesters and non-crystalline polyesters were produced using raw material monomers shown in Table 5 and they were used for the resin compositions and toners.

Please replace Table 5 on page 60 of the Specification with the following:

Table 5

			Example 1	Comparative Example [[12]]
Crystalline polyester	Raw material monomer	Terephthalic acid (mol)	100	-
		2,6-naphthalenedicarboxylic acid (mol)	-	100
		Ethylene glycol (mol)	-	-
		1,4-butanediol (mol)	120	120
	Evaluation	Melting point (°C)	227	261
		Heat absorption (mj / mg)	73.1	67.1
		Glass transition temperature (°C)	34	45
Weight average molecular weight		85000	65000	
Non-crystalline polyester	Raw material monomer	Terephthalic acid (mol)	90	90
		Isophthalic acid (mol)	5	5
		Phthalic anhydride (mol)	5	5
		Trimellitic acid(mol)	-	-
		Neopentyl glycol (mol)	60	60
		Ethylene glycol (mol)	60	60
		Bisphenol A ethylene oxide adduct(mol)	-	-
	Evaluation	Glass transition temperature (°C)	63	63
		Weight average molecular weight	21000	21000
Resin mixing for a toner (part by weight)		Crystalline polyester	25	25
		Non-crystalline polyester	75	75
		Carnauba wax(part by weight)	1	1
Evaluation	Evaluation of resin composition for a toner	Glass transition temperature (°C)	56	62
		Acid value of resin	0.3	0.3
		Color tone of resin	Cobless and transparent	Cobless and transparent
		Heat absorption of resin (mj / mg)	13.4	3.0
		Average particle diameter of crystal particles (μm)	-	-
		Haze value (%)	-	-
		Recrystallization initiating temperature (Tic) (°C)	-	-
		Recrystallization peak temperature (Tpc) (°C)	-	-
		Tpc-Tic (°C)	-	-
		Relaxation modulus G _{5%} (0.1) (Pa)	-	-
		Relaxation modulus G _{5%max} (Pa)	-	-
		Change rate D of relaxation modulus	-	-
		Relaxation modulus (0.02) (Pa)	9.55×10 ⁴	1.45×10 ⁵
		Relaxation modulus (0.1) (Pa)	3.86×10 ³	3.42×10 ²
		Slope K of relaxation modulus curve	-17.4	-32.9
	Evaluation of toner	Blocking (% by weight)	0.5	0.5
		Filming evaluation	None	None
		Gloss evaluation	37	11
		High temperature offset temperature (°C)	220 or higher	180
		Low temperature offset temperature (°C)	140	145
		Lowest fixation temperature (°C)	145	150
		Color reproducibility	G	F